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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/643,645	KRALLMAN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Dave Robertson	3623			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 18 Au	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-146 is/are pending in the application 4a) Of the above claim(s) 19-37, 55-72, 91-109 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-18,38-54,73-90 and 110-127 is/are 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	<u>, and 128-146</u> is/are withdrawn fr rejected.	om consideration.			
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the confidence of Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examine 11).	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date none.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte			

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DETAILED ACTION

1. This is a Non-final First Office Action on the Merits on claims 1-18, 38-54, 73-90, 110-127.

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-18, 38-54, 73-90, and 110-127, drawn to a method, system and computer program product for selecting survey questions according to an inclusion value and providing the survey questions to survey participants, classified in class 705, subclass 10.
 - II. Claims 19-37, 55-72, 91-109, and 128-146, drawn to a method, system, and computer program product for selecting responses to a survey question for inclusion in a list of available responses, based on initial selection rates and fallback response values, classified in class 705, subclass 10.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as selecting questions for inclusion in a survey, the questions using a set of fixed or uniform responses for all survey questions. See MPEP § 806.05(d).

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The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

- 3. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:
 - (a) the inventions have acquired a separate status in the art in view of their different classification;
 - (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
 - (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
 - (d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C.101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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4. During a telephone conversation with Atty James Leiz on 1/25/2008 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-18, 38-54, 73-90, 110-127. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-37, 55-72, 91-109, and 128-146 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

5. Claim 38 is objected to because of the following informalities: at line 4, "configures" is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claims 38-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 38 recites: A system for selecting survey questions...comprising...software and hardware configures [sic] to determine... However, it is unclear what is specifically encompassed by software and hardware and which of or how these components are configured or interrelate to perform the recited function. For the purposes of examination on the merits the limitation will be interpreted as performing the function

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recited in software executed on a computer. Claims 39-54 depend from claim 38 and are similarly rejected and interpreted.

Appropriate amendment is requested.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-18 are rejected under 35 U.S.C. 101 based on Supreme Court precedent, and recent Federal Circuit decisions. For a process to be patentable subject matter under § 101 the process must (1) be tied to another statutory class of invention (such as a particular apparatus) or (2) transform subject matter to a different state or thing. See Diamond v. Diehr, 450 US 175, 184 (1981); Parker v Flook, 437 US 584, 588 n9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 US 780, 787-88 (1876). If neither of these requirements is met by the claim, the method is not a patent eligible process. To qualify under § 101 as a statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

In the present case, claim 1 recites a method (a process) of storing, determining, selecting, and providing survey questions to a survey participant without positively reciting that the storing, determining, selecting, or providing are performed by a

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computer. Rather, the claim encompasses the method performed by hand, with, potentially, the questions stored, determined, selected, and provided by a human without mechanical means. While claims 2-8 recite the step of providing the survey via a computing device, personal computer, kiosk, etc., storing questions on the local or remote device, these steps involving the computer device only nominally for display and storage of information (the survey questions). As such, claims 2-8, though reciting hardware, do not recite a sufficient tie to the statutory class on which it relies.

Therefore, all of claims 1-18 are held non-statutory over the precedents and decisions cited above.

Appropriate amendment is requested.

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Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

11. Claims 1-3, 7-9, 14-17, 38, 39, 43-45, 50-53, 73-75, 79-81, 86-89, 110-112, 116-118, and 123-126 are rejected under 35 U.S.C. 102(e) as being anticipated by Desai et al (US Pat. 6,618,746) herein "Desai".

Claim 1

Desai teaches a method for selecting survey questions for inclusion in a survey, including storing survey questions and survey response information provided by survey participants (see Figure 1 and related discussion); determining an inclusion value for each survey question (see columns 4-5: the inclusion value is the determination, yes or no, inherent to the "branching" or "piping" logic of Desai); selecting a stored survey question for inclusion in a survey based on the inclusion value of each survey question (see column 4, line 5-21); and providing the selected survey question to a survey participant (see column 3, lines 40-56; and column 5: "Details of the Client").

Claims 2 and 3

Desai teaches a client receiving and presenting the questionnaire on a computer (see Figure 3). A computer is a personal computing device.

Claims 7 and 8

By the client receiving the questionnaire from the server via computer network" (column 3, lines 27-44), Desai teaches both local and remote storage of the survey questions.

Claim 9

Desai teaches the inclusion value of each stored survey question is based on associated conditional branching logic (see column 4 at line 15).

Claim 14

Desai teaches an inclusion value of a survey question based on conditional branching logic (see column 4 at line 15), the branching logic being performed by electronic computer over a computer network in response to survey participants answers to questions immediately preceding. Therefore, it is inherent to Desai that the inclusion value of each stored survey question is determined in <u>substantially real-time</u>.

Claims 15 and 16

Desai teaches as above for claim 9, an inclusion value of each stored survey question is based on associated conditional branching logic (see column 4 at line 15). The inclusion value of a question in which the conditional branching logic selects the question for inclusion is necessarily higher than the inclusion value of an "other" question, not selected by the branching logic. For example, in at least the case of employing binary logic in the conditional branching function of Desai, the inclusion value of the selected question is "1"; the inclusion value of the unselected "other" question is

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zero "0". By the same example, (with respect to claim 16) the *threshold* for inclusion is one "1".

Claim 17

Desai teaches inclusion of questions from a question database based on conditional branching and piping logic, whereby all questions are at least initially to be included, until such time as a survey participant responds to a question controlling the branching or piping logic. Therefore, it is inherent to Desai that all questions are designated a common initial inclusion value for all stored survey questions (i.e. all questions are initially, equally included until determined otherwise).

<u>Claims 38, 39, 43-45, and 50-53</u> recite computer implemented systems for performing the methods of claims 1-3, 7-9, and 14-17, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 73-75, 79-81, and 86-89</u> recite computer-implemented system means for performing the methods of claims 1-3, 7-9, and 14-17, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 110-112, 116-118, and 123-126</u> recite computer program product for performing the methods of claims 1-3, 7-9, and 14-17, and are similarly rejected for reasons given above for the respective claim and claim elements.

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Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 4-6, 40-42, 76-78, and 113-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al (US Pat. 6,618,746) as applied under 35 U.S.C. 102(e) above to claim 1.

Claims 4-6

Desai does not expressly teach the survey being provided by various computing devices, namely, a kiosk, a point-of-sale (POS) terminal, or an interactive voice response (IVR) system.

Official Notice is taken that it is old and well known to provide surveys by various computing devices contained or configured as *kiosks* and *point-of-sale terminals*, or by telephone using interactive voice response. It would have been obvious to one of ordinary skill in the art at the time of invention to provide surveys by these various computing devices as this would have provided access to survey participants in a variety of venues by various means (i.e. malls, stores, by telephone), thereby increasing participation in the survey by providing the participant convenient access to the survey device.

<u>Claims 40-42</u> recite computer implemented systems for performing the methods of claims 4-6 and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 76-78</u> recite computer-implemented system means for performing the methods of claims 4-6, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 113-115</u> recite computer program product for performing the methods of claims 4-6, and are similarly rejected for reasons given above for the respective claim and claim elements.

14. Claims 10, 11, 46, 47, 82, 83, 119, and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al (US Pat. 6,618,746), as applied to claim 1 above, and further in view of Choi (US Pat. 6,895,405).

Claims 10 and 11

Desai does not expressly teach wherein the inclusion value of each stored survey question is [or is "based on"] the response variance for each stored survey question.

<u>Choi</u> teaches automated methods for computing the effectiveness of a survey question based on statistical analyses of the responses by computing the response distribution, a measure of the response variance for survey questions. Choi teaches "efficiently computing an effectiveness score" for the express purpose of eliminating questions from a survey questionnaire (see Choi, column 5, line 17-22).

One of ordinary skill in the art at the time of invention would have recognized, given Choi's teaching of computing a survey question effectiveness score using the response variance, with Desai's teaching of a survey system capable of selecting questions based on responses and providing therein a Response Processor (Figure 1) with a Statistical Analysis Engine having a Statistical Package Interface (Figure 4 Item 440), that improving Desai using Choi's method of computing an effectiveness score, would have resulted, predictably, with means to eliminate questions from surveys based on an inclusion value (the effectiveness score).

It would have been obvious to one of ordinary skill in the art at the time of invention to base the inclusion of each stored survey question on the response variance, as this would have eliminated ineffective questions from the surveys, leading to shorter surveys and more meaningful response data.

<u>Claims 46 and 47</u> recite computer implemented systems for performing the methods of claims 10 and 11, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 82 and 83</u> recite computer-implemented system means for performing the methods of claims 10-11, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 119 and 120</u> recite computer program product for performing the methods of claims 10 and 11, and are similarly rejected for reasons given above for the respective claim and claim elements.

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15. Claims 12, 18, 48, 54, 84, 90, 121, and 127 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al (US Pat. 6,618,746), as applied to claim 1 above, and Smith et al (US Pat. 6,993,495).

Claims 12 and 18 recite an inclusion value based on a *global inclusion value multiplier*, defined by the specification (page 17) as a factor applied to the inclusion values of the remaining questions based on the duration (elapsed time) of the survey, thereby shortening a survey that is taking too long; however, Desai does not teach a global inclusion value multiplier based on the duration of the survey applied to the inclusion value of each stored survey question.

Smith teaches automated methods of conducting online surveys, including reducing the number of questions a respondent must answer at a single time or on a single web page (Smith, column 20, lines 26-36; column 21, lines 41-49). Reducing the number of questions a respondent must answer directly reduces the duration of the survey and leads to increased completions, a desirable outcome of conducting online surveys (see Smith, column 21 from line 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply a global inclusion factor to the selection of questions in Desai for adjusting inclusion of questions in the survey based on the duration of the survey, as increased completions would have been the predictable result of decreasing the number of questions asked, leading to greater numbers of respondents completing surveys, and therefore better data for analysis of the surveyed subject.

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<u>Claims 48 and 54</u> recite computer implemented systems for performing the methods of claims 12 and 18, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 84 and 90</u> recite computer-implemented system means for performing the methods of claims 12-18, and are similarly rejected for reasons given above for the respective claim and claim elements.

<u>Claims 121 and 127</u> recite computer program product for performing the methods of claims 12 and 18, and are similarly rejected for reasons given above for the respective claim and claim elements.

16. Claim 13, 49, 85, and 122 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai et al (US Pat. 6,618,746), as applied to claim 1 above, and further in view of Choi (US Pat. 6,895,405) and Smith et al (US Pat. 6,993,495).

Claim 13 recites wherein the inclusion value of each stored survey question is based on a <u>combination</u> of conditional branching logic, response variance, and a global inclusion value multiplier. For reasons given above, Desai in view of Choi and Desai in view of Smith teach or suggest the respective elements of claim 13, namely, as in claim 9 (branching logic), claim 10 (response variance), and claim 12 (global inclusion) value. However, Desai does not teach the inclusion value <u>based on the combination on elements</u>:

A combination of old elements is obvious when it does no more than yield predictable results. One of ordinary skill would have been recognized that including multiple elements in the inclusion value would improve the overall value for selection of questions for the survey, however, the predictable result of basing the inclusion value for a question on all three of the recited elements would have been merely to base the inclusion value by an amount proportional to each basis taken independently.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the inclusion value based on *conditional branching logic, response variance, and the global inclusion value multiplier*, as this would have lead to improved selection of questions and thus better surveys and resulting data, accordingly to the aims of the survey.

<u>Claim 49</u> recites computer implemented systems for performing the method of claim 13, and is similarly rejected for reasons given above for the respective claim elements.

<u>Claim 85</u> recites computer-implemented system means for performing the method of claim 13, and is similarly rejected for reasons given above for the respective claim elements.

<u>Claim 122</u> recites computer program product for performing the method of claim 13, and is similarly rejected for reasons given above for the respective claim elements.

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Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hays (US Pat. 6,865,578) teaches automated methods for design and analysis of market research studies, including providing surveys by interactive voice response.

Gustman et al (US Pat. 6,581,071) teaches multiple surveys based on sets of questions alternatively used, while allowing response analysis based on the individual questions which may be selected for different ones of the multiple surveys.

Walker et al (US Pat. 6,616,458) teaches automated method for administering online surveys.

Kraft et al (US Pat. 6,912,521) teaches automated methods for conducting surveys with real-time analysis of response data.

Madl et al (US Pat. 6,513,071) and Nanos et al (US Pat. 6,381,744) teach automated methods of providing surveys by survey kiosk.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Robertson whose telephone number is (571)272-8220. The examiner can normally be reached on 9 am to 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Van Doren can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dave Robertson/ Examiner, Art Unit 3623

/Beth Van Doren/ Supervisory Patent Examiner, Art Unit 3623